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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,521	04/30/2001	David Matheny	10559-380001	5533
20985	7590	03/15/2006		
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER SWEARINGEN, JEFFREY R	
			ART UNIT	PAPER NUMBER
			2145	
DATE MAILED: 03/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/846,521

Applicant(s)

MATHENY ET AL.

Examiner

Jeffrey R. Swearingen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 December 2005 has been entered.

### ***Response to Arguments***

2. Applicant filed a terminal disclaimer in co-pending application 09/891,225 against the instant application on 14 December 2004. Applicant should file a disclaimer in the instant application against co-pending application 09/891,225 to complete the legal record. This will overcome the provisional double patenting rejection.

3. In regard to claim 12, Farrell disclosed data collectors that produce duplicate entries that are subsequently removed or otherwise modified by the aggregation processor. This was clearly taught in column 4, lines 15-30. Aggregation requires taking two or more duplicate data entries and then subsequently removing or modifying said data entries. If said data entries were not removed and/or modified, they would remain as duplicate entries and the point of aggregating said data entries would be moot.

4. The rejections under 35 U.S.C. 101 and claim objections were removed based upon the amendment of claims 16 and 27.

5. The further arguments involving claim 16 are addressed in the body of the office action.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 12-13, 16, and 25-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Farrell et al. (U.S. Patent No. 6,751,663).

8. In regard to claim 16, Farrell disclosed an article, including instructions residing on a machine-readable medium for *receiving discovery data collected from a network device by two or more discovery agents; aggregating said discovery data; generating a relationship file characterizing relationships among network devices identified by the two or more agents; (column 6, lines 42-50) coalescing the discovery data in a software file comprising a discovery document, said discovery data including two or more duplicate data entries; and removing all but one of the duplicate data entries from the discovery document.* See Farrell, Abstract; column 2, lines 35-50, column 3, lines 7-17 and 46-58; column 4, lines 15-31.

9. In regard to claim 25, Farrell further disclosed *receiving discovery data collected from two or more network device[s] by said two or more discover agents.* See Farrell, column 2, lines 25-39; column 3, lines 47-49.

10. In regard to claims 12 and 26-27, Farrell is applied as in claim 16. Farrell further disclosed *generat[ing] [assigning] a key for each discovered network device in the discovery document based on a precedence file containing instructions for generating keys; and appending said precedence file to said discovery document.* See Farrell, column 7, line 50 – column 9, line 41. See Farrell, Table 1. Farrell assigned identifiers and translates collected information into network accounting records, which is the same as assigning keys for devices and appending the keys to the document.

11. In regard to claims 13 and 28, Farrell is applied as in claims 12 and 27. Farrell further disclosed the use of a *plurality of discovery agents.* See Farrell, column 2, lines 25-39; column 3, lines 47-49. Farrell further discloses the use of a *plurality of aggregator agents.* See Farrell, column 18, line 40 – column 19, line 11.

***Claim Rejections - 35 USC § 103***

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 14, 17-19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell and Barrett et al. (U.S. Patent No. 6,633,909).

14. In regard to claims 14, 17 and 29 Farrell is applied as in claims 12, 16 and 28. Farrell failed to disclose the use of an agent directory. However, Barrett disclosed an agent directory. See Barrett, Abstract; column 2, line 57 – column 3, line 9. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Farrell and Barrett because the network management station has to be made aware of the agent. See Barrett, column 1, lines 49-62. Farrell gave motivation for the combination by stating data collection systems [agents] are used to collect information from network traffic flow and deliver the data. See Farrell, column 1, lines 7-30.

15. In regard to claim 18, Farrell and Barrett are applied as in claim 17. Farrell further disclosed the use of *two or more discovery agents*. See Farrell, column 2, lines 25-39; column 3, lines 47-49.

16. In regard to claim 19, Farrell is applied as in claim 17. Farrell further disclosed the use of *two or more aggregator agents*. See Farrell, column 18, line 40 – column 19, line 11.

17. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell, Barrett and Libert et al. (U.S. Patent No. 6,574,655).

18. In regard to claim 20, Farrell and Barrett are applied as in claim 17. Farrell and Barrett failed to disclose the use of XML to describe agents. However, Libert used XML to describe agents. See Libert, column 6, lines 58-61. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Farrell and Barrett with Libert for the purpose of allowing the agent information to be used by heterogeneous peers during a discovery process. See Libert, column 3, line 63 – column 4, line 32. Farrell gave motivation by stating that disparate network devices can be used in the discovery process. If devices were not operating under the same set of protocols (e.g. disparate), then

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unless a common method such as XML is used for communication, one of ordinary skill in the art would have known that the devices would not be able to communicate. See Farrell, column 2, lines 30-34.

19. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Fletcher et al. (WO 98/26541).

20. In regard to claim 21, Farrell is applied as in claim 16. Farrell failed to disclose eliminating duplicate data entries from different agents by use of a priority value. However, Fletcher disclosed assigning different priorities to different agents and using this priority to eliminate duplicate data reports. See Fletcher, page 21, lines 29-31. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Farrell and Fletcher for the purpose of reducing unnecessary network traffic overhead and eliminating duplicate information. See Fletcher, page 21, lines 10-13. One of ordinary skill in the art at the time of the invention would have known that reducing network traffic would increase the speed and collisions within the entire network, while eliminating duplicate data entries would increase processor efficiency.

21. In regard to claim 22, Farrell and Fletcher are applied as in claim 21. Farrell further disclosed *receiving discovery data collected from two or more network device[s] by said two or more discover agents*. See Farrell, column 2, lines 25-39; column 3, lines 47-49.

22. In regard to claim 23, Farrell is applied as in claim 21. Farrell further disclosed the use of *two or more aggregator agents*. See Farrell, column 18, line 40 – column 19, line 11.

23. Claims 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Libert.

24. In regard to claims 24 and 30, Farrell is applied as in claims 16 and 28. Farrell failed to disclose the use of XML to describe agents. However, Libert used XML to describe agents. See Libert, column 6, lines 58-61. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Farrell with Libert for the purpose of allowing the agent information to be used by heterogeneous peers during a discovery process. See Libert, column 3, line 63 – column 4, line 32.

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Farrell gave motivation by stating that disparate network devices can be used in the discovery process. If devices were not operating under the same set of protocols (e.g. disparate), then unless a common method such as XML is used for communication, one of ordinary skill in the art would know that the devices would not be able to communicate. See Farrell, column 2, lines 30-34.

25. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Barrett and in further view of Libert.

26. In regard to claim 15, Farrell and Barrett are applied as in claim 14. Farrell and Barrett failed to disclose the use of XML to describe agents. However, Libert used XML to describe agents. See Libert, column 6, lines 58-61. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Farrell and Barrett with Libert for the purpose of allowing the agent information to be used by heterogeneous peers during a discovery process. See Libert, column 3, line 63 – column 4, line 32. Farrell gave motivation by stating that disparate network devices can be used in the discovery process. If devices were not operating under the same set of protocols (e.g. disparate), then unless a common method such as XML is used for communication, one of ordinary skill in the art would have known that the devices would not be able to communicate. See Farrell, column 2, lines 30-34.

### ***Conclusion***

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

28. Goebel, Michael et al. "A Survey of Data Mining and Knowledge Discovery Software Tools".

ACM SIGKDD Explorations Newsletter. ACM Press. Volume 1, Issue 1. June 1999. pp. 20-33.

29. Ramanathan, Srinivas et al. "Auto-Discovery Capabilities for Service Management: An ISP Case Study." Journal of Network and Systems Management. December 2000. Volume 8, No. 4. pp 457-482.

30. Ramanathan et al. U.S. Patent No. 6,286,047

31. Hemphill et al. U.S. Patent No. 6,490,617

32. Seshadri et al. U.S. Patent No. 6,615,201

33. Barkai et al. U.S. Pub. No. 2002/0032769

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|-----|------------------|----------------------------|
| 34. | Battat et al.    | U.S. Pub. No. 2003/0033402 |
| 35. | Govindaraayan    | JP 410105482A              |
| 36. | Schettler et al. | EP 0 772 318 A2            |
| 37. | Gase             | EP 0 918 412 A2            |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Swearingen whose telephone number is (571) 272-3921. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jason Cardone  
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Art Unit 2145